Amendments to the Specification:

Please replace the paragraph starting at page 11, line 21 with the following replacement paragraph:

~~Figure 19~~Figures 19A-N illustrates the selectivity of in vivo angiogenic effects of EG-VEGF. Panels a-c show the results of a rat corneal pocket assay. Note the strong angiogenic response induced by VEGF protein, while EG-VEGF has essentially no effect. Panels d-f show the results obtained by ~~unjecting~~injecting adCMV-lacZ, AdCMV-VEGF$_{164}$, or AdCMV-EG-VEGF (5×10^8 pfu) in the skeletal muscle (sm) of nude rats. Arrowheads point to microspheres marking the injection site, arrows point to new blood vessels. Note the angiogenic response, with abundant new vessel formation, induced by VEGF, while both lacZ and EG-VEGF Av had no appreciable effects. Panels g-h show the results of VEGF and EG-VEGF Av injection in the mouse ear. Again, VEGF Av resulted in a strong angiogenic response, which was absent in the animals injected with EG-VEGF Av (scale bar in d-h=100 µm). Panel i shows the gross appearance of ovaries (ov) following injection of LacZ (ct) VEGF or EG-VEGF Av, after seven days (scale bar=0.5 cm). Note the much larger mass plus the presence superficial vessels and hemorrhagic areas in both VEGF and EG-VEGF groups. Panels j-n are micrographs of ovaries injected with Av vectors (5×10^8 pfu), as indicated. Note the normal architecture and morphology of the lacZ ovary in j. Corpora lutea (CL) are indicated. In contrast, the VEGF (k) and EG-VEGF (1) groups revealed very similar changes, with large fluid-filled or hemorrhagic cystic areas (*) (scale bar in j-l=1 mm). Panels m-n are high power micrographs (scale bar=33 µm) of boxed areas in k and l, respectively. Areas of intense angiogenesis are evident at the periphery of cystic lesions. Arrows point toward blood vessels.

Please replace the paragraph starting at page 12, line 10 with the following replacement paragraph:

Figures 20A-~~P~~Q provide the complete source code for the ALIGN-2 sequence comparison computer program. This source code may be routinely compiled for use on a UNIX operating system to provide the ALIGN-2 sequence comparison computer program.